

18. (Amended) An optical element having a film on its surface, said film comprising at least one layer of silica containing fluorine, wherein said concentration of the fluorine is not less than 1 mol%.

19. (Amended) An optical element having a film on its surface, said film comprising at least one layer of silica containing fluorine, wherein a refractive index of the layer or layers of silica for F₂ laser light is 1.60 to 1.80.

20. (Amended) An optical element having a film on its surface, said film comprising at least one layer of silica containing fluorine, wherein said film further comprises a layer of a material selected from the group consisting of MgF₂, LiF, and Na₃AlF₆.

21. (Amended) The optical element according to claim 17, wherein said element is comprised of fluorite.

22. (Amended) The optical element according to claim 17, wherein said element is comprised of silica containing fluorine.

23. (Amended) The optical element according to claim 17, wherein said film is an antireflection coating.

Kindly add new claims 24 and 25 as follows:

24. (New) An optical apparatus for vacuum ultraviolet lithography, comprising the optical element as set forth in any one of claims 17-23.

25. (New) A method for making a device, comprising:

(a) exposing a wafer in a device pattern by the optical apparatus as set forth in claim 24; and

(b) developing the wafer exposed in said step (a).

REMARKS

The claims are 17-25, with claims 17-20 being independent. Claims 1-5 and 10-16 have been cancelled. Claims 17-20 have been rewritten in independent form. Claims 21-23 have been amended to reflect the cancellation of claim 16. New claims 24 and 25 have been added. The new claims are based on cancelled claims 10-15. Clearly, no new matter has been added. Reconsideration of the claims is expressly requested.

Claims 16 and 21-23 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by U.S. Patent No. 6,421,188 B1 (Maehara). Since claim 16 has been cancelled and claims 21-23 have been amended to depend from claim 17, this rejection is moot and should be withdrawn.

Claims 17-20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Maehara in view of U.S. Patent No. 5,028,967 (Yamada) and further in view of U.S. Patent No. 6,224,976 (Takushima). This rejection is respectfully traversed.